

DETAILED ACTION

Applicant's reply dated October 19, 2009 to the Office Action mailed on July 21, 2009 is acknowledged. Claims 1-16, 21, 22, 26 and 28 have been amended. Claims 1-10 and 28-29 are present for examination. The amendments to the claims are entered.

Objections and rejections not re-iterated from the previous Office Action are hereby withdrawn.

EXAMINER'S AMENDMENT

An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it **MUST** be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Attorney Jonathan Myers on 11/02/2009.

Claims 1-6, 12-15 replace:

“...a natural 3-phosphoglycerate dehydrogenase...”

with

“...a wild type 3-phosphoglycerate dehydrogenase...”

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Claims 1-6, 12-15 amend:

“...reduced feedback inhibition through L-serine ...”

with

“...reduced feedback inhibition by L-serine...”

Replace claim 9 reciting:

Claim 9. (Previously presented) A recombinant gene structure containing at least one nucleic acid according to claim 1, claim 2, claim 3, claim 4 or claim 5 as well as regulatory sequences operatively linked therewith.

with

Claim 9. (Currently amended) The recombinant nucleic acid sequence of claim 1, claim 2, claim 3, claim 4 or claim 5 further comprising a the 3-phosphoglycerate dehydrogenase regulatory sequence operably linked therewith.

Replace claim 10 reciting:

Claim 10 (previously presented) A vector containing a recombinant gene structure according to claim 9 as well as additional nucleotide sequence for selection, replication in a host cell or for interaction in a host cell genome.

with

10. (Currently amended) ~~[[A]] An expression vector containing a recombinant gene structure~~ nucleic acid sequence according to claim 9 as well as additional nucleotide sequence for selection, replication in a host cell or for ~~interaction~~ integration in a host cell genome.

Replace claim 11 reciting:

Claim 11. (Previously presented) A mutant deregulated 3-phosphoglycerate dehydrogenase or a part thereof, which in comparison to natural 3-phosphoglycerate dehydrogenase has reduced feedback inhibition through L-serine expressed by a

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nucleic acid sequence, which consists of SEQ ID NO: 1, SEQ ID NO: 3, SEQ ID NO: 4, or SEQ ID NO: 5, respectively, expressing an amino acid sequence consisting of SEQ ID NO: 7, SEQ ID NO: 8, SEQ ID NO: 9, SEQ ID NO: 10, or SEQ ID NO: 11 respectively.

with:

11. (Currently amended). A mutant deregulated 3-phosphoglycerate dehydrogenase where said mutant 3-phosphoglycerate dehydrogenase is expressed from a nucleic acid consisting of SEQ ID NO: 1, SEQ ID NO: 2, SEQ ID NO: 3, SEQ ID NO: 4 or SEQ ID NO: 5 that encode the amino acid sequence of SEQ ID NO: 7, SEQ ID NO: 8, SEQ ID NO: 9, SEQ ID NO: 10 or SEQ ID NO: 11 respectively and where said mutant deregulated 3-phosphoglycerate-dehydrogenase has a reduced feedback inhibition by L-serine compared to the wild type 3-phosphoglycerate dehydrogenase.

Replace claim 16 reciting:

16. (Previously presented) A mutant deregulated 3-phosphoglycerate-dehydrogenase, which in comparison to natural 3-phosphoglycerate dehydrogenase has reduced feedback inhibition according to claim 11 with an amino acid sequence consisting of SEQ ID NO: 11.

with

16. (Currently amended) A mutant deregulated 3-phosphoglycerate-dehydrogenase according to claim 11, consisting of SEQ ID NO: 11 where said mutant deregulated 3-phosphoglycerate-dehydrogenase has a reduced feedback inhibition by L-serine compared to the wild type 3-phosphoglycerate dehydrogenase.

Amend claims 20 and 21 as follows:

20. (Currently amended) A microorganism containing ~~at least one~~ a nucleic acid according to claim 1, claim 2, claim 3, claim 4 or claim 5 in ~~replicable~~ replicable form and which by comparison with the wild type microorganism is expressed in an amplified manner and/or has its copy number increased.

21. (Currently amended) A microorganism according to claim 20 ~~containing in replicable form a recombinant gene structure consisting of the at least one nucleic acid as well as~~ further comprising regulatory sequences operatively linked thereto and additional nucleotide sequences for selection, replication, in a host cell or for ~~interaction~~ integration in ~~the~~ the host cell genome.

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Claim 22:

In line 5 of claim 22 replace the recitation:

“...wild type line...” with “...wild type microorganism...”

Conclusion: Claims 1-26, 28-29 are allowed with the above amendments.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to KAGNEW H. GEBREYESUS whose telephone number is (571)272-2937. The examiner can normally be reached on 8:30am-5:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, ANDREW WANG can be reached on 571-272-0811. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Kagnew H Gebreyesus/
Examiner, Art Unit 1656

/Andrew Wang/

Supervisory Patent Examiner, Art Unit 1656